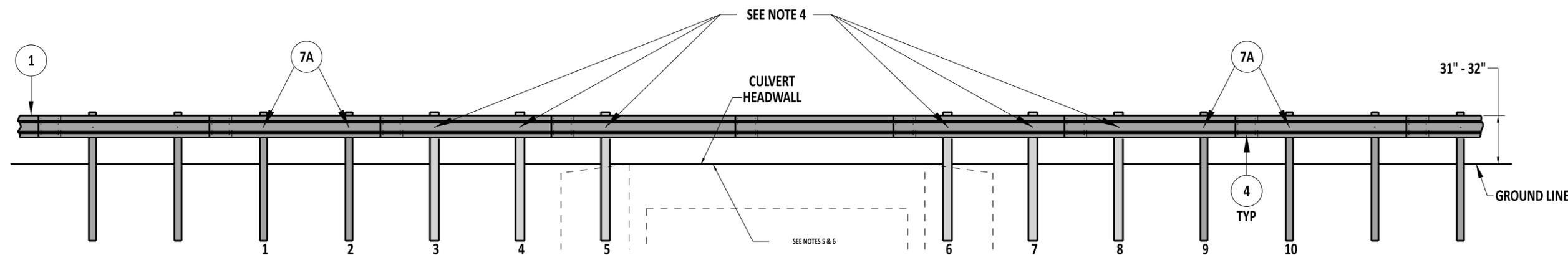


PLAN



ELEVATION

NOTES:

- 1). FOR OMITTING ONE POST, SEE DETAIL B-1, SHEET 4.
- 2). PLACE GUARDRAIL DELINEATORS IN ACCORDANCE WITH DETAIL B-13, SHEET 9.
- 3). POSTS 1, 2, 9, & 10 ARE TO BE W6x9, 6'-0" STEEL POSTS. POSTS 3 THROUGH 8 ARE TO BE TYPE 31 LONG, WOOD BREAKAWAY POSTS.
- 4). THE RAIL SHALL BE ATTACHED AT POSTS 3 THROUGH 8 WITH A 5/8" x 22" GUARDRAIL BOLT, STEEL WASHER, AND RECESS NUT.
- 5). WHERE THE HEADWALL PROJECTION IS LESS THAN 2" ABOVE GRADE, THE BACK OF THE CRT POST MAY BE ALIGNED WITH THE NEAR SIDE OF THE HEADWALL.
- 6). WHERE THE STRUCTURE PROJECTION IS GREATER THAN 2" ABOVE GRADE, THE INSIDE FACE OF THE HEADWALL SHALL BE A MINIMUM OF 8'-0" FROM THE FACE OF THE W-BEAM.
- 7). PROVIDE AT LEAST 50'-0" OF TYPE 1-31 GUARDRAIL, INCLUDING END ANCHORAGE, TO ENSURE INTENDED FUNCTION.
- 8). PROVIDE AT LEAST 37'-6" OF TANGENT 1-31 GUARDRAIL BEFORE INTRODUCING GUARDRAIL FLARES IN ACCORDANCE WITH THE RATES SHOWN IN STANDARD DETAIL B-1, SHEET 1 TO ENSURE INTENDED FUNCTION.
- 9). IF CURB IS USED, IT SHALL BE A MAX 2" HEIGHT WITHIN THE LIMIT OF PAYMENT OF THE GUARDRAIL OVER CULVERT.
- 10). MASH COMPLIANT SYSTEM - FHWA ELIGIBILITY LETTER B-189.



Andrew Shott
ENGINEERING SUPPORT
RECOMMENDED
12/13/2022
DATE

GUARDRAIL OVER CULVERTS, TYPE 3-31
STANDARD NO. B-3 (2022) SHT. 2 OF 2

REVIEWED *[Signature]* 12/16/2022
DEPUTY DIRECTOR - DESIGN DATE
APPROVED *[Signature]* 12/21/2022
CHIEF ENGINEER DATE